## ABSTRACT OF THE DISCLOSURE

Objects of the invention is to make a fuel for generating power unnecessary, to generate no carbon dioxide (CO<sub>2</sub>) by generating power without burning 5 substance, and to make it possible to supply a hot water at the same time of generating power. A solar heat utilization stirling engine power generation plant is constituted by a Fresnel lens (1) for collecting a solar heat, a quartz glass light guiding fiber (3) for 10 guiding a heat source collected by the Fresnel lens (1) and having a temperature between about 600°C and about 2000°C to a predetermined place, a stirling engine (4) driven by the heat source from the light guiding fiber (3), and a power generator (5) driven 15 by the stirling engine (4).